

C L A I M S:

1. A method pertaining to a particle filter (3) for an exhaust system of a combustion engine whereby the filter (3) is regenerated by spontaneous combustion of particles accumulated in the filter, **characterised** in that exhaust gases from the combustion engine in operation are led past the filter (3) when the counterpressure in the exhaust gases which is caused by the filter (3) exceeds a certain level.
2. A method according to claim 1, **characterised** in that exhaust gases from the combustion engine are led past the filter (3) through a valve (4) which opens when the counterpressure in the exhaust gases is above said level.
3. A method according to claim 2, **characterised** in that the valve (4) opens because of the action of the pressure of the exhaust gases against a holding-back spring (13;16).
4. A method according to claim 1 or 2, **characterised** in that said counterpressure is detected by at least one pressure sensor (17) whose output signals are used for controlling (CDU) the bypassing of the filter.
5. A method according to any one of the foregoing claims, **characterised** in that the exhaust gases are led past the filter (3) through a space inside a silencer (1) which encloses the filter (3).
6. A method according to any one of the foregoing claims, **characterised** in that the exhaust gases are caused to pass through a catalyst (2) even during bypassing of the filter (3).
7. A device pertaining to a particle filter (3) for an exhaust system of a combustion engine whereby the filter (3) is adapted to being regenerated by spontaneous combustion of particles accumulated in the filter, **characterised** by a bypass duct via which exhaust gases from the combustion engine in operation are arranged to be led

past the filter (3) when the counterpressure in the exhaust gases which is caused by the filter (3) exceeds a certain level.

8. A device according to claim 7, **characterised** by a valve (4) which is arranged to
5 open when the counterpressure in the exhaust gases is above said level, in order to lead exhaust gases from the combustion engine past the filter (3).

9. A device according to claim 8, **characterised** in that the valve (4) is provided with
10 a holding-back spring (13;16) which the pressure of the exhaust gases acts against.

10. A device according to claim 7 or 8, **characterised** by at least one pressure sensor
(17) for detecting said counterpressure, the output signals from which are arranged to
be used for controlling (CDU) the bypassing of the filter (3).

15 11. A device according to any one of claims 7 - 10, **characterised** in that the exhaust gases are led past the filter (3) through a space inside a silencer (1) which encloses the filter (3).

12. A device according to any one of claims 7 - 11, **characterised** by means for
20 causing the exhaust gases to pass through a catalyst (2) even during bypassing of the filter (3).

13. A silencer (1) which comprises a device according to any one of claims 7 - 12.

25 14. A vehicle which is driven by combustion engine and comprises at least one silencer (1) according to claim 13.